ODES TO A COMPUTER

**AN ODE IS A POEM WRITTEN IN HONOR OF SOMEONE OR SOMETHING.
THE ODES ON THIS POSTER ARE WRITTEN ABOUT ALL KINDS OF COMPUTERS—EVEN ROBOTS!
DO YOU LIKE COMPUTERS? IF SO, WRITE YOUR OWN ODE TO A COMPUTER!**

COMPUTER KID

I'm a computer kid.
I love my new machine.
I do what I always did,
But I do it on a screen.

I'm a keyboard kid.
I've learned to type like crazy.
I do what I always did—and more!
'Cuz now I'm not so lazy.

I'm a printout kid.
I love to run off copy.
I do what I always did,
But I do it on a floppy!

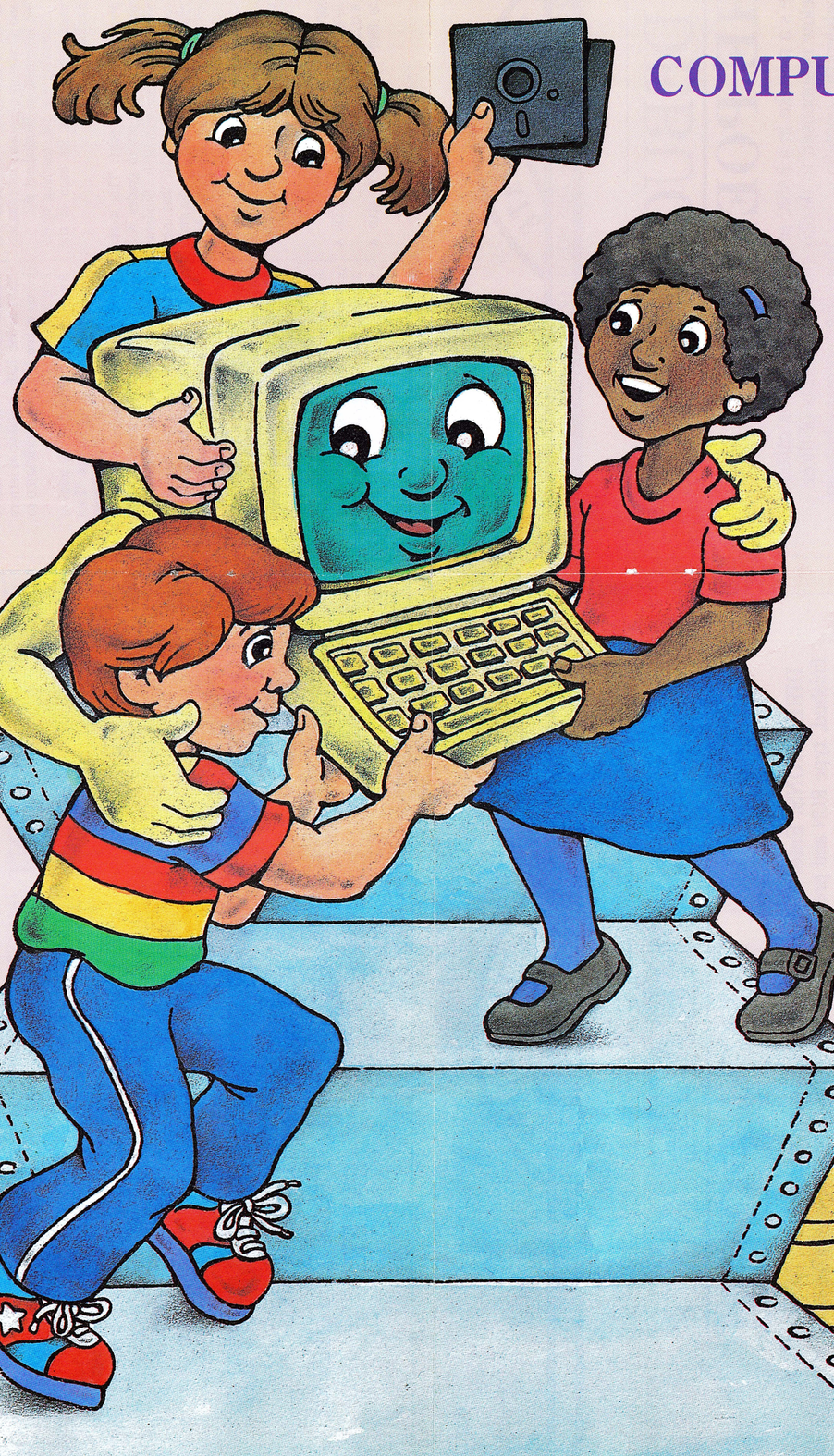
MY COMPUTER LOVES ME

Roses are red,
Violets are blue,
Computers are helpers
For me and for you.

Daisies have petals,
Grasses have blades.
Computers have programs
To better our grades.

Pansies need water,
Peonies need sun.
Computers need only
Electricity to run.

Flowers are pretty,
Flowers are free.
I love my computer,
My computer loves me!



WHAT MAKES A COMPUTER COMPUTE?

What makes a computer compute?
What makes its bright lights blink?
What makes a computer...
think?

How does a computer compute?
How does it run inside?
How does a computer...
decide?

Why does a computer compute?
Why does it clatter and perk?
Why does a computer...
work?

MY ROBOT

My robot wakes me up,
And pours hot chocolate in my cup.
After breakfast it helps me dress,
And when I leave, it cleans my mess.

After supper it does my math,
And runs hot water for my bath.
I let it tuck me into bed,
And pat me gently on the head.

When I ask it for a story,
My robot says, "I'm sorry,
I cannot read you off to sleep.
I can only say *beep beep*."

Poems by Ron Roy
Poster illustration by Little Apple Art
***Teaching and Computers* Poster Series**
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DIRECTIONS FOR USING THE WORKSHEETS ON THIS POSTER

TEACHERS' NOTES

The worksheets on this poster have two purposes: they provide short review lessons on BASIC programming and they expose children to poetry. The first worksheet, labeled "Primary," is designed for use with primary grade children. The bottom two worksheets, both labeled "Intermediate," are to be used with children in grades 4 through 8.

Duplicate the worksheets that correspond to your grade level, hang up the other side of this poster, and you are ready to present a lesson on poetry *and* BASIC programming!

START WITH THE POSTER

Direct students' attention to the "Odes to a Computer" poster (on the flip side of this poster). Have a child read the poster's introductory paragraph aloud. It will explain what an *ode* is (a poem written in praise of someone or something).

Let kids take turns reading aloud the computer odes on the poster. Then ask them to write their own poems, or odes, about computers (on a word processor, if possible). When children are finished, have them read their poems aloud and then display hard copies on a bulletin board.

REVIEW A FEW BASIC COMMANDS

Before you distribute the worksheets, make sure students know how to use the following BASIC commands:

1. NEW tells the computer to clear its memory and get ready to store another program.
2. PRINT tells the computer to show words, numbers, or symbols on the screen. Those words, numbers, or symbols must always be in quotation marks.
3. END tells the computer that a program is completed.
4. RUN orders the computer to carry out a program.

Remember: In a program listing, the number of a program line comes first, followed by a space, and then the BASIC command word and any other information the computer needs to perform a task. Here is a short BASIC program that tells the computer how to print the word "word."

```
NEW
10 PRINT "WORD."
20 END
```

For more information on using the BASIC commands listed above, see the BASIC Challenge Cards column in your copy of the February 1986 issue of *Teaching and Computers* magazine.

DISTRIBUTE THE WORKSHEETS

Distribute the worksheets that correspond to your students' grade level and have them complete the sheets individually. Access to a computer is optional for completing the Primary Worksheet, not needed at all for Intermediate Worksheet #1, and absolutely necessary for completing Intermediate Worksheet #2.

Following are the teaching objectives and answers for each of the worksheets.

Primary Worksheet: This worksheet is for students in grades K-3 who are just learning BASIC. Students complete a program listing that uses PRINT statements to display the nursery rhyme, "Humpty Dumpty." As a challenge activity, they can then enter the program into their computer and see the display. The completed program listing should read as follows:

```
NEW
10 PRINT "HUMPTY DUMPTY SAT ON A WALL,"
20 PRINT "HUMPTY DUMPTY HAD A GREAT FALL."
30 PRINT "ALL THE KING'S HORSES AND ALL THE KING'S MEN,"
40 PRINT "COULDN'T PUT HUMPTY TOGETHER AGAIN."
50 END
```

Intermediate Worksheet #1: This worksheet is for students in grades 4 through 8. It contains a program listing that uses PRINT statements to display selections from three famous poems written by Henry Wadsworth Longfellow. The program listing has several bugs in it, however. Children are to find the bugs and insert the corrections in pencil where they belong in the program listing.

The following corrections should be made to the program listing: insert a space and the word PRINT in line 30 right after the line number; change first line numbered "50" to "40;" insert end quote in line 50; change PRONT to PRINT in line 60; put a space between command and quote in line 80; put a space between line number and PRINT in line 100; insert PRINT in line 130; capitalize all letters in Print in line 150; change FINISHED to END in line 190.

Answer to Challenge: The titles of the poems in the program are "Paul Revere's Ride," "The Village Blacksmith," and "The Children's Hour."

Intermediate Worksheet #2: This worksheet is for students in grade 4 through 8. It provides a program listing that will help children write their own poems. Students enter the listing into their computer, type RUN, press ENTER or RETURN, and follow the directions the program gives them. They will produce original poems.

The challenge segment of this worksheet asks kids to create a program listing that will help them write a poem that rhymes. Answers will vary.

COPY

PRIMARY

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

FINISH THE POEM

DIRECTIONS: The program below should print a poem. But it is not finished yet. Use the word list to finish the poem. Write your answers on the blank lines.

```
NEW
10 PRINT "HUMPTY DUMPTY SAT
    ON A _____."
20 PRINT "HUMPTY DUMPTY HAD A
    GREAT _____."
30 PRINT "ALL THE KING'S HORSES
    AND ALL THE KING'S _____,"
40 PRINT "COULDN'T PUT HUMPTY
    TOGETHER _____."
50 END
```

WORD LIST

AGAIN
FALL
MEN
WALL

TO SEE THIS PROGRAM ON THE COMPUTER:

1. Put your computer in BASIC
2. Type the program into the computer.
3. Type RUN.
4. Press RETURN or ENTER.

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COPY

INTERMEDIATE

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

DEBUG THE POEMS

DIRECTIONS: When there's a mistake in a BASIC program, the error is called a *bug*. The BASIC program below is supposed to display the first stanzas of three famous poems by Henry Wadsworth Longfellow, but there are too many bugs in it. Can you fix the program? Write your corrections where they belong.

Can you name the poems in this program? Write their titles in the blanks on lines 10, 70, and 140.

```
NEW
10 PRINT "_____"
20 PRINT "LISTEN, MY CHILDREN, AND YOU SHALL HEAR"
30 "OF THE MIDNIGHT RIDE OF PAUL REVERE,"
50 PRINT "ON THE EIGHTEENTH OF APRIL, IN SEVENTY-
FIVE,"
50 PRINT "HARDLY A MAN IS NOW ALIVE
60 PRONT "WHO REMEMBERS THAT FAMOUS DAY AND
YEAR."
70 PRINT "_____"
80 PRINT"UNDER A SPREADING CHESTNUT TREE"
90 PRINT "THE VILLAGE SMITHY STANDS;"
100PRINT "THE SMITH, A MIGHTY MAN IS HE,"
110 PRINT "WITH LARGE AND SINEWY HANDS;"
120 PRINT "AND THE MUSCLES OF HIS BRAWNY ARMS"
130 "ARE STRONG AS IRON BANDS."
140 PRINT "_____"
150 Print "BETWEEN THE DARK AND THE DAYLIGHT,"
160 PRINT "WHEN THE NIGHT IS BEGINNING TO LOWER,"
170 PRINT "COMES A PAUSE IN THE DAY'S OCCUPATIONS"
180 PRINT "THAT IS KNOWN AS THE CHILDREN'S HOUR"
190 FINISHED
```

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COPY

INTERMEDIATE

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

CREATE YOUR OWN POEM

DIRECTIONS: Enter this BASIC program into your computer. When you are finished, type RUN and press RETURN or ENTER. You'll have a program that will help you write a poem!

```
NEW
10 HOME
20 PRINT "WELCOME TO THE WORLD OF POETRY!"
30 PRINT "WHAT'S YOUR NAME?"
40 INPUT N$
50 PRINT "HELLO, ";N$;", LET'S WRITE SOME POETRY."
60 PRINT:PRINT "FIRST, ENTER A NOUN.": INPUT A$
70 PRINT "NOW ENTER TWO WORDS THAT DESCRIBE ";A$;"."
80 PRINT "ENTER THE WORDS ONE AT A TIME."
90 INPUT B$:INPUT BB$
100 PRINT "ENTER THREE WORDS THAT TELL WHAT ";A$;" DOES."
110 PRINT "AGAIN, ENTER THE WORDS ONE AT A TIME."
120 INPUT C$:INPUT CC$:INPUT CX$
130 PRINT "ENTER A PHRASE OR SENTENCE ABOUT ";A$;".":INPUT D$
140 PRINT: "ENTER A SYNONYM FOR ";A$;".": INPUT E$
150 HOME: PRINT "HERE IS YOUR POEM:"
160 PRINT:PRINT A$;" BY ";N$
170 PRINT:PRINT A$
180 PRINT B$;", ";BB$
190 PRINT C$;", ";CC$;", ";CX$
200 PRINT D$
210 PRINT E$
220 PRINT:PRINT "NICE WORKING WITH YOU, ";N$;"...."
230 END
```

NOTE: This program will run as listed for Apple computers. If you have a Commodore computer, change HOME to PRINT CHR$(147) in lines 10 and 150. If you have a TRS-80 or IBM computer, change HOME to CLS in lines 10 and 150. If you have an Atari computer, change HOME to PRINT CHR$(125) in lines 10 and 150. Atari users also must add these lines:

```
1 DIM A$(50),B$(50),C$(50),CC$(50)
2 DIM CX$(50),D$(120),E$(50),N$(50)
```

CHALLENGE: Can you write a similar program to create a poem that rhymes?

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